THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte ROBERT E. RINEHART
and PETER J. KARTHEISER

_____

Appeal No. 94-4259
Application 07/853,224[1]

_____

ON BRIEF

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Before DOWNEY, METZ and PAK, Administrative Patent Judges.

DOWNEY, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1, 3-10, 12, 14-17 and 24; claims 18-23 pending in the application are directed to a non-elected invention and, thus, are not before us.

[1] Application for patent filed March 17, 1992.

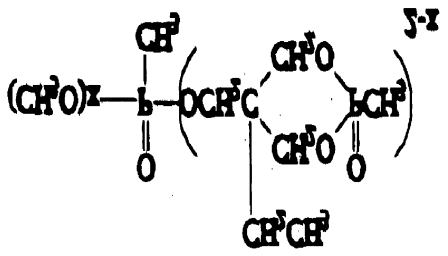
The subject matter on appeal is directed to a flame retardant multilayer structure.

Appellants separately argue claims 1, 16, 17 and 21. Claim 1 is representative of the invention and reads as follows:

1. A multi-layer structure comprising:

a first layer comprising a composition comprising a fire retardant polyolefin, and,

a second layer comprising a composition comprising a polyamide and a phosphonate ester of the formula:



wherein "x" is 0 or 1.

The references relied upon by the examiner are:

Anderson et al. (Anderson)	3,789,091	Jan. 29, 1974
Campbell	4,327,248	Apr. 27, 1982
Hauser et al. (Hauser)	4,732,789	Mar. 22, 1988
Kartheiser	4,868,054	Sep. 19, 1989

Claims 1, 3-10, 12, 14-17, and 24 stand rejected under 35 U.S.C.§ 103 as unpatentable over Campbell or Kartheiser in view of Hauser and Anderson. [2]

After careful consideration of the arguments of appellants and the examiner and of the record before us, we find ourselves in agreement with appellants. Accordingly, on this record, we cannot sustain the examiner's rejection.

Claim 1 is directed to a multilayer structure comprising two layers. The first layer comprises a fire retardant polyolefin and the second a polyamide containing a certain phosphonate ester fire retardant.[3]

Campbell discloses a multilayer structure comprising a olefin layer next to a non-olefinic nylon layer with and without an adhesive between these layers (see Table 1, Sample 2). The non-olefinic layer is said to be flame-retardant (column 3, lines 1-8). Both Hauser and Anderson describe phosphonate esters as useful flame retardants for nylon.

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[2] The examiner in his answer (page 6) referred to and relied upon the Anderson reference, however, he failed to list it in the statement of the rejection. Where a reference is relied on to support a rejection, whether or not in a minor capacity, there would appear to be no excuse for not positively including the reference in the statement of the rejection. In re Hoch, 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970). Appellants filed a reply brief responding to the examiner's reliance upon Anderson. Accordingly, we consider the statement of the rejection to include the Anderson reference.

[3] Claim 8, which depends from claim 1, recites a mixture of fire retardants, whereas claim 1 is limited to a single fire retardant. Appellants should correct claim 1 to embrace mixtures of fire retardants.

Anderson further teaches that the flame retardant composition may be in the form of a fiber, film, coating, sheet, etc. (col. 21, lines 60-64). Although Campbell does not disclose how the non-olefinic nylon layer is made fire-retardant, in our view the use of single or multiple compounds known to be effective flame retardants for nylon in such non-olefinic layer would have been prima facie obvious to one of ordinary skill in the art. Campbell does not describe the use of a flame retardant in the olefin layer.

The examiner has pointed to sample 4 as describing a fire retardant polyolefin next to a polyamide. Sample 4 discloses a flame retardant chlorosulfonated polyethylene layer and an ethylene copolymer layer with and without a polyamide based adhesive therebetween. Campbell identifies chlorosulfonated polyethylene as non-olefinic (column 2, lines 29-51). Accordingly, we find no support for the examiner's allegation.

Kartheiser describes a polyvinylchloride (non-olefinic) layer and a polyamide layer with and without a polyvinyl adhesive therebetween. The examiner alleges that Kartheiser discloses a medium comprising a fire retardant polyolefin and polyamide in column 4. However, we, like the appellants, cannot find any teaching to support the examiner's position in Kartheiser. We do note that Kartheiser indicates that in prior art structures, an adhesive layer comprised an acid-modified olefinic polymer and an acid-modified halogen-containing olefinic polymer are known (column 1, lines 34-37). However, the examiner has not determined whether this olefinic

adhesive layer contains a flame retardant or whether the addition of a fire retardant to an olefinic adhesive layer would have been obvious.

On this record, the examiner has failed to establish a prima facie case of obvious. In re Piasecki, 745 F.2d 1468, 1471, 223 USPQ 785, 787 (Fed. Cir. 1984); Carella v. Starlight Archery Pro Line Co., 804 F.2d 135, 139, 231 USPQ 644, 644 (Fed. Cir. 1986); Ashland Oi l, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 301-302, 227 USPQ 657, 675 (Fed. Cir. 1985), cert. denied 475 U.S. 1017 (1986). Accordingly, we will not sustain the examiner's rejection.

We note at page two of the specification, appellants refer to a technical paper which describes various types of fire-retardant polyolefins in wire and cable constructions. The examiner should evaluate the teachings of this reference and make

an initial determination of whether the claimed subject matter would have been prima facie obvious in light of the teachings of said reference.

REVERSED

MARY F. DOWNEY	)
Administrative Patent Judge	)
	)
	)BOARD OF PATENT
ANDREW H. METZ	)
Administrative Patent Judge	) APPEALS AND
	)
	)INTERFERENCES
CHUNG K. PAK	)
Administrative Patent Judge	)

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